

In the Claims:

- 1 1. (previously presented) A method for processing and reusing
2 gray water for flushing a toilet bowl, comprising the
3 steps:
4 a) filtering said gray water to provide filtered water,
5 b) collecting said filtered water in a processing tank,
6 c) processing said filtered water by anodically oxidizing
7 said filtered water in said processing tank to provide
8 processed water, and
9 d) using said processed water for flushing said toilet
10 bowl,
11 wherein said filtering comprises a coarse filtering and a
12 fine filtering for removing dirt, coloring agents, and
13 odor-causing agents from said gray water, and wherein said
14 fine filtering is performed in said processing tank and
15 said coarse filtering is performed outside said processing
16 tank.

Claims 2 and 3 (canceled).

- 1 4. (previously presented) The method of claim 1, further
2 comprising using an exchangeable, externally accessible
3 fine filter in said processing tank for performing said
4 fine filtering.

- 1 5. (previously presented) The method of claim 1, further
2 comprising using an exchangeable, externally accessible

4538/WFF:kd

- 2 -

3 coarse filter in or connected to or arranged next to
4 a lavatory basin for performing said coarse filtering.

1 6. (original) The method of claim 1, wherein said step of
2 anodically oxidizing is performed to such an extent that
3 germ growth is prevented in or on any component of a water
4 distribution system through which said processed water is
5 distributed.

1 7. (original) The method of claim 1, further comprising
2 detecting through a sensor at least one filling level in
3 said processing tank to produce a control signal for
4 controlling a water flow.

1 8. (original) The method of claim 1, further comprising
2 providing an overflow discharge in said processing tank and
3 feeding said overflow discharge into a gray water
4 collecting conduit.

1 9. (original) The method of claim 8, further comprising
2 leading said gray water collecting conduit into an outboard
3 draining mast or device.

1 10. (previously presented) The method of claim 8, further
2 comprising leading said gray water collecting conduit into
3 a gray water collecting container.

1 11. (previously presented) The method of claim 26, further
2 comprising pressurizing said gray water and passing
3 pressurized gray water through spray nozzles for rinsing
4 said wastewater collecting tank and other system
5 components.

1 12. (withdrawn) The method of claim 7, further comprising
2 detecting said at least one filling level as a minimum
3 filling level, producing said control signal as a minimum
4 level control signal for controlling a fresh water supply
5 faucet of a lavatory basin in a lavatory for replenishing
6 water in said processing tank to a medium filling level
7 from said fresh water supply faucet.

1 13. (withdrawn) The method of claim 12, further comprising
2 sensing an unoccupied status of said lavatory to provide an
3 unoccupied control signal, and automatically opening said
4 fresh water supply faucet only in response to said minimum
5 level control signal and said unoccupied control signal.

1 14. (withdrawn) The method of claim 12, further comprising
2 using an infrared detector and a lavatory door switch for
3 performing said sensing, and further producing an occupied
4 control signal to disable said automatic opening of said
5 fresh water supply faucet when said lavatory is occupied.

1 15. (previously presented) The method of claim 1, further
2 comprising monitoring and controlling all of said steps
3 through a central processing unit and respective sensors.

1 16. (previously presented) The method of claim 1, further
2 comprising presetting in a central processing unit a
3 defined temperature range for water passing through a
4 faucet of a lavatory basin having an outlet connected to
5 said processing tank, and using said central processing
6 unit to control a water heater connected upstream of said
7 faucet so as to heat said water as needed to maintain a
8 temperature of said water in said defined temperature
9 range.

1 17. (withdrawn) The method of claim 1, further comprising
2 sensing a plurality of filling levels including a maximum
3 filling level and a minimum filling level in said
4 processing tank to produce respective control signals for
5 controlling the withdrawal of processed water from said
6 processing tank so that more processed water is withdrawn
7 from said processing tank in response to a higher filling
8 level signal and less processed water is withdrawn from
9 said processing tank in response to a lower filling level
10 signal.

1 18. (previously presented) The method of claim 1, further
2 comprising sensing a plurality of filling levels including
3 a high filling level and a low filling level in said

4538/WFF:kd

- 5 -

4 processing tank to produce respective high filling level
5 and low filling level control signals for controlling a
6 fresh water supply through a faucet and a lavatory basin so
7 that a larger fresh water volume is supplied into said
8 processing tank through said faucet and lavatory basin in
9 response to said low filling level signal and a smaller
10 fresh water volume is supplied into said processing tank
11 through said faucet and lavatory basin in response to said
12 high filling level control signal.

Claims 19 to 25 (canceled).

1 26. (previously presented) The method of claim 10, further
2 comprising locating said gray water collecting container
3 near a wastewater collecting tank.

1 27. (previously presented) The method of claim 18, further
2 comprising starting replenishing water in said processing
3 tank in response to said low filling level control signal
4 and stopping said replenishing in response to said high
5 filling level control signal when water in said processing
6 tank reaches said high filling level.

1 28. (new) An apparatus for processing and reusing gray water
2 for flushing a toilet bowl, comprising:

3 a) filter means for filtering said gray water to provide
4 filtered water,

b) a processing tank for collecting said filtered water in said processing tank,

c) anodic oxidizer means for processing said filtered water by anodically oxidizing said filtered water in said processing tank to provide processed water, and

d) means for using said processed water for flushing said toilet bowl,

wherein said filter means comprise a coarse filter and a fine filter for removing dirt, coloring agents, and odor-causing agents from said gray water, and wherein said fine filter is arranged in said processing tank and said coarse filter is arranged outside said processing tank.

29. (new) The apparatus of claim 28,

wherein said coarse filter has a coarse filter inlet connected to a source of said gray water and a coarse filter outlet connected to a tank inlet of said processing tank; and

wherein said means for using said processed water comprises a pump having a pump inlet connected to said processing tank, an excess pressure valve connected to a pump outlet of said pump, a rinsing spray nozzle installed in said toilet bowl and connected to said excess pressure valve for rinsing said toilet bowl with said processed water in response to a generated control signal for a predetermined time interval at the end of which said pump is switched off and said excess pressure valve is closed.

1 30. (new) The apparatus of claim 29, wherein said pump is a
2 rotary pump.

1 31. (new) The apparatus of claim 29, wherein said pump
2 comprises a cylinder and a piston in said cylinder, said
3 apparatus further comprising a detector positioned for
4 detecting an end position of said piston indicating that
5 processed water in said cylinder has been discharged, said
6 detecting providing a control signal, and a motor
7 responsive to said control signal for driving said piston
8 back into a starting position, whereby processed water is
9 sucked into said cylinder for a next toilet bowl rinse.

1 32. (new) The apparatus of claim 29, further comprising a
2 central control unit, sensors for providing status signals
3 to said central control unit, at least one first power
4 supply for said pump, a faucet for supplying fresh water to
5 a lavatory basin, at least one second power supply for a
6 faucet control, a suction device connected to said toilet
7 bowl, and at least one third power supply for said suction
8 device, and wherein said central control unit is adapted to
9 control said first, second and third power supplies in
10 response to said control signals.

1 33. (new) The apparatus of claim 32, further comprising a
2 communication area network (CANBUS) to which said central
3 control unit is connected for communicating via said
4 communication area network.

4538/WFF:kd

- 8 -

1 34. (new) The apparatus of claim 29, further comprising
2 separate conduits for freshwater, gray water and waste
3 water, and wherein a direct connection between said
4 conduits is avoided.

1 35. (new) The apparatus of claim 29, installed in an aircraft.

[RESPONSE CONTINUES ON NEXT PAGE]

4538/WFF:kd

- 9 -